

ADVANCES IN MATHEMATICS **104**, 155–156 (1994)

Book Reviews

B. KORTE, L. LOVASZ, AND R. SCHRAIDER, *Greedoids*, Springer, 1991, 211 pp.

What? We thought that combinatorial abstraction had reached its limits with the concept of matroid, and now we are suddenly confronted with a radically new concept, one that seems equally natural. We were forced to read this book from top to bottom, and—I hope—so will you.

T. E. CECIL, *Lie Sphere Geometry*, Springer, 1992, 207 pp.

One of the most disconcerting (but also one of the most encouraging) signs of confusion (but also a sign of finding the lost path) is the current reevaluation of theories that seemed forever buried and forgotten. To an elder mathematician, it is a cause of cheer, not unmixed with a smile of condescension, to see that his or her long announced return of Lie sphere geometry is at last a reality. Such cheer goes together with the spectacle of theories of recent invention, only a few years ago considered the *dernier cri* and expected to forever make obsolete all the mathematics that came before them, going down the drain of oblivion, their reexhumation deferred *ad kalendas Graecas*.

M. FITTING, *First-Order Logic and Automated Theorem Proving*, Springer, 1990, 242 pp.

Nowadays, if you wish to learn logic proper, you had better look at the computer science shelves in the bookstore. What goes by the name of logic has painted itself into a number of unpleasant corners (set theory, large cardinals, independence proofs) which make it the branch of mathematics which is currently farthest removed from what we believe to be mainstream logic. In this book, the author once more shows himself to be one of the masters of logic exposition.

G. GRIMMETT, *Percolation*, Springer, 1989, 296 pp.

Percolation is without question one of the most fascinating chapters of probability. Some of the results are truly outstanding; others are predictable but hard to prove. Altogether, the difficulty of the subject is incommensurate with its importance and naturalness; one expects something as central and as beautiful to have some pretty proof here and there, and not to be engulfed by physicists' "heuristic arguments" for lack of proofs. Such is, alas, not the case, as the present book amply demonstrates.

D. L. K. SNYDER AND M. I. MILLER, *Random Point Processes in Time and Space* (second ed.), Springer, 1991, 481 pp.

The theory of point processes is the most fascinating of the currently active chapters of probability, and by far the most promising. Of several attractive introductions to appear in